

**Amendments to the Specification:**

Please note that the paragraph numbers designated below refer to the numbering in the application as filed. The paragraph numbering in the published application differs slightly.

Please replace paragraph [0068] of the application (paragraph [0071] of the published version of the application) by the following amended paragraph:

[0068] FIG. 3B is, more specifically, a flowchart depicting a method of issuing an ISW, SSPD and/or TISP after the initialization period is over. It will be noted that generating an ISW, SSPD and/or TISP during the initialization period is certainly feasible by using default or clinician selected predictor(s) with corresponding parameters; however, in accordance with the embodiment illustrated in FIGS. 3A and 3B, that is not the case. Consequently, the first step in the method of FIG. 3B is step 341, wherein the algorithm activates the seizure warning and prediction features. These features may be automatically activated by setting a software "switch", by setting a status flag, or by any similar process that causes, thereafter, the algorithm to issue an ISW, SSPD and/or TISP under the appropriate conditions. In step 342, the method will acquire and preprocess the electrical or electromagnetic signals, calculate the  $STL_{MAX}$  values, and calculate T-index values.

Please replace paragraph [0073] (paragraph [0076] of the published version of the application) by the following amended paragraph:

[0073] FIG. 3C is a flowchart depicting a method for generating an ISW, SSPD and/or TISP in a non-clinical application. As is readily apparent, the method depicted in FIG. 3C is substantially similar to the method depicted in FIG. 3A. The electrical or electromagnetic signals continue to be acquired and processed in accordance with the "NO" path out of decision step 371 until the patient experiences a seizure. After a seizure, as illustrated by the "YES" path out of decision step 371, the algorithm makes a critical channel selection, as illustrated in step 373. One difference, however, is that the non-clinical method depicted in FIG. 3C does not employ a distinct initialization period. As such, there is no time period during which the algorithm selects a particular predictor  $G_x K_y$ . Instead, the clinician may make this selection during setup step 361. Alternatively, the algorithm could provide a

default selection. In addition, as there is no initialization period, the seizure warning and prediction features are activated, as illustrated in step 376, after the acceptance step 375 of the initial critical channel selection. Accordingly, the algorithm will issue an ISW, SSPD and/or TISP in accordance with the "YES" path out of decision step 383, the "WARNING" path out of decision step 385, and step 387 if it determines that the corresponding conditions for doing so have been met. Thereafter, the algorithm reselects the critical channel groups, as shown in step 389, in the same manner as described for step 355 of FIG. 3B. If, instead, the algorithm detects a seizure, in accordance with the "YES" path out of decision step 383 and the "SEIZURE" path out of decision step 385, the algorithm will thereafter reselect the critical channel groups as shown in step 391, in the same way the algorithm reselected the critical channel groups in step 357 of FIG. 3B. The algorithm repeats this process, in accordance with the "NO" path out of decision step 393, until terminated per the "YES" path out of decision step 393.

Please replace paragraph [0085] (paragraph [0088] of the published version of the application) by the following amended paragraph:

[0085] Steps 307, 317 and 319 in FIG. 3A, 343 and 345 in FIG. 3B, and 367, 377 and 379 in FIG. 3C involve evaluating the entrainment of the  $L_{MAX}$  profiles, or more specifically,  $STL_{MAX}$  profiles. Evaluation may be achieved by calculating the average and standard deviation of the difference over consecutive  $STL_{MAX}$  values falling within a "sliding" time window. The length of time associated with the "sliding" time windows is approximately 10 minutes (i.e., a span of approximately 60 epochs). The result is a sequence of average T-index 15 values over time for each channel group of the predictor. The data associated with these calculations may be displayed through the GUI and stored per step 309 in FIG. 3A, 347 in Fig. 3B and step 369 in FIG. 3C.